

**REMARKS**

Claims 1-15 were pending when last examined. With this Response, Applicant has amended Claims 1 and 9. All pending claims are shown in the detailed listing above.

**Claim Rejections – 35 USC § 102**

Claims 1, 3, 4, 6, 8, 9, 11, 12, 14 and 15 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Stanescu et al. (USPN 6,518,737). Applicant respectfully traverses.

Claim 1, as amended, recites *inter alia*, “a gate modulated diode connected between the input terminal and the output terminal, the gate modulated diode having a forward voltage drop that is controllable by a voltage signal applied to a gate of the gate modulated diode, wherein the gate modulated diode comprises a transistor operating at below gate threshold voltage.” Stanescu et al. does not disclose or teach such limitation.

The Examiner asserts that in Stanescu et al., “Fig. 2 discloses an input terminal  $V_{in}$ , an output terminal  $V_{out}$ , an inherent load, a gate modulated diode 24, and a first operational amplifier 104 with a low supply voltage  $V_{in}$  as recited in claim 1.” Applicants respectfully disagree.

Item 24 in Fig. 2 of Stanescu et al. is a power PMOS transistor (see col. 5, line 41). It is not a “gate modulated diode.” Nor does Stanescu disclose that the power PMOS transistor 24 operates at below gate threshold voltage. As such, Stanescu et al. does not disclose or teach the limitation of a “gate modulated diode [which] comprises a transistor operating at below gate threshold voltage,” as recited in Claim 1. Thus, Claim 1 is not anticipated by Stanescu et al.

For at least the reasons discussed above, Applicant respectfully requests that the rejection of Claim 1 under 35 U.S.C. § 102(e) be withdrawn and this claim be allowed. Furthermore, because each of Claims 3, 4, 6, and 8 depend from Claim 1 and include further

limitations, Applicant respectfully requests that the rejection of these dependent claims under 35 U.S.C. § 102(e) also be withdrawn and these dependent claims be allowed.

Claim 9, as amended, recites *inter alia*, “a transistor operating at below gate threshold voltage and connected between the input terminal and the output terminal, the transistor having a forward voltage drop which can be changed in response to a voltage applied to a gate of the transistor.” Stanescu et al. does not disclose or teach such limitation. Thus, Claim 9 is not anticipated by Stanescu et al.

For at least the reasons discussed above, Applicant respectfully requests that the rejection of Claim 9 under 35 U.S.C. § 102(e) be withdrawn and this claim be allowed. Furthermore, because each of Claims 11, 12, 14, and 15 depend from Claim 9 and include further limitations, Applicant respectfully requests that the rejection of these dependent claims under 35 U.S.C. § 102(e) also be withdrawn and these dependent claims be allowed.

Claims 1, 3, 4, 8, 9, 11, 12, 14 and 15 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Sichert et al. (USPN 6,133,779). Applicant respectfully traverses.

As discussed above, Claim 1, as amended, recites *inter alia*, “a gate modulated diode connected between the input terminal and the output terminal, the gate modulated diode having a forward voltage drop that is controllable by a voltage signal applied to a gate of the gate modulated diode, wherein the gate modulated diode comprises a transistor operating at below gate threshold voltage.” Sichert et al. does not disclose or teach such limitation.

According to the Examiner in Sichert et al., “The Figure discloses an input terminal Vext, an output terminal Vint, an inherent load, a gate modulated diode T, and a first operational amplifier OP with a low supply voltage Vext as recited in claim 1.” Applicants do not agree.

The item referred to by “T” is not a gate modulated diode, nor does Sichert et al. disclose that the item T operates at below gate threshold voltage. As such, Sichert et al. does not disclose or teach the limitation of a “gate modulated diode [which] comprises a transistor

operating at below gate threshold voltage,” as recited in Claim 1. Thus, Claim 1 is not anticipated by Sichert et al.

For at least the reasons discussed above, Applicant respectfully requests that the rejection of Claim 1 under 35 U.S.C. § 102(b) be withdrawn and this claim be allowed. Furthermore, because each of Claims 3, 4, and 8 depend from Claim 1 and include further limitations, Applicant respectfully requests that the rejection of these dependent claims under 35 U.S.C. § 102(e) also be withdrawn and these dependent claims be allowed.

Claim 9, as amended, recites *inter alia*, “a transistor operating at below gate threshold voltage and connected between the input terminal and the output terminal, the transistor having a forward voltage drop which can be changed in response to a voltage applied to a gate of the transistor.” Sichert et al. does not disclose or teach such limitation. Thus, Claim 9 is not anticipated by Sichert et al.

For at least the reasons discussed above, Applicant respectfully requests that the rejection of Claim 9 under 35 U.S.C. § 102(b) be withdrawn and this claim be allowed. Furthermore, because each of Claims 11, 12, 14, and 15 depend from Claim 9 and include further limitations, Applicant respectfully requests that the rejection of these dependent claims under 35 U.S.C. § 102(b) also be withdrawn and these dependent claims be allowed.

**Claim Rejections – 35 USC § 103**

Claims 2, 5, 10 and 13 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Stanescu et al. Applicants respectfully traverse.

Claims 2, 5, 10, and 13 depend from Claims 1 and 9, which as discussed above are allowable over Stanescu et al. Claims 2, 5, 10, and 13 include further limitations. For at least the reasons discussed above, Applicant respectfully requests that the rejection of these

dependent claims under 35 U.S.C. § 103(a) also be withdrawn and these dependent claims be allowed.

Claims 2, 5, 10 and 13 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Sichert et al.

Claims 2, 5, 10, and 13 depend from Claims 1 and 9, which as discussed above are allowable over Sichert et al. Claims 2, 5, 10, and 13 include further limitations. For at least the reasons discussed above, Applicant respectfully requests that the rejection of these dependent claims under 35 U.S.C. § 103(a) also be withdrawn and these dependent claims be allowed.

**Allowable Subject Matter**

Applicant appreciates the Examiner's indication that Claim 7 is allowable.

As discussed above, Claim 1, from which Claim 7 depends, is in condition for allowance. As such, Applicants respectfully request the Examiner to withdraw the objection to dependent Claim 7.

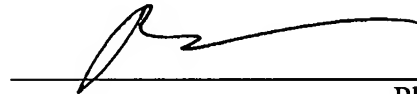
**CONCLUSION**

Applicant respectfully requests that the pending claims be allowed and the case passed to issue. Should the Examiner wish to discuss the Application, it is requested that the Examiner contact the undersigned at (415) 772-7428.

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Respectfully submitted,

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